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BLUE WATER CARRIERS IN A BROWN WATER NAVY

by

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A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Operations.

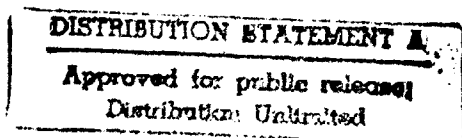
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Abstract of  
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## Blue Water Carriers in a Brown Water Navy

### I. INTRODUCTION

The cataclysmic events of the later part of the past decade ushered in a period of world-wide upheaval and disorder. The disintegration of the Soviet Union and the collapse of Soviet communism marked the end of the Cold War. Ethnic struggles, latent nationalism and regional concerns, formerly in the shadow of superpower struggle, have now taken center stage. U.S. national security and military strategies are evolving around this new environment. Simultaneously, military force structure is being "rightsized" to align with this changed strategy and the decline in U.S. economic power. The challenge for the U.S. is to shape military forces for effective employment in the warfare environments of the future.

The aircraft carrier will remain the centerpiece for our changing maritime strategy. The expeditionary nature and power projection capabilities of the carrier make it the keystone for national security in the principal elements of forward presence and crisis response. In the event of hostilities, the aircraft carrier's ability to quickly respond and influence events by presence, or force, make it an invaluable war-fighting tool for the operational commander.

Carriers, moving forward to respond in crisis situations, will face unique challenges operating in the complex operating environment of the littoral or "coastlines of the earth". As noted in the September 28, 1992 Navy/Marine Corps Strategy White Paper *From the Sea*, "Mastery of the littoral should not be presumed. It does not derive from command of the high seas. It is an objective which requires our focused skills and resources."<sup>1</sup>

The aircraft carrier is presently shaped around an open-ocean, Soviet threat. "Mastery of the littoral" will require the carrier to adapt war-fighting capabilities around the new operational environment. Operational commanders must: (1) understand the capabilities and employment concepts for using the carrier as an instrument of U.S. foreign policy, in the context of the changed security landscape, (2) appreciate the problems and risks associated with operating in the littoral - despite the, "at first glance", lessons learned from Desert Storm, and (3) develop new operational concepts for employing the carrier in this new environment.

This paper will address these issues from an operational commander's perspective. Three major sections are presented. First, the discussion will examine the dynamics behind the movement from global to regional concerns and shifting paradigms for the employment of the carrier. Second, the primary problems and risks of operating in littoral waters will be identified - using

Desert Storm as a point of departure for risk assessment. Finally, key operational concepts will be introduced in order to help create a vision for the employment of the aircraft carrier in the littoral arena.

This analysis will conclude that the carrier will be effective on the littoral battlefield if: (1) operational commanders understand, and take advantage of, the inherent capabilities of this key expeditionary asset, (2) the real "littoral lessons learned" and other relevant problems/risks from Desert Storm are studied, appreciated and applied toward future conflicts, and (3) innovative operational concepts continue to evolve which provide the CINC the tools necessary to influence events and, if necessary, fight in this challenging environment.

It will be beyond the scope of this paper to present specific deployment strategies or specific design or procurement issues.

## II. FROM BLUE WATER TO BROWN

As the continuing turmoil in virtually every region of the world underscores, we have not achieved a permanent peace. Although the forces of integration are stronger than ever, new and in some cases dormant forces of fragmentation have also been unleashed. Even as the danger of global war recedes, the potential for smaller but still highly destructive conflicts between nations and within nations is growing.<sup>2</sup>

### **Moving From Global to Regional Concerns**

Strategies for the Future. Recognizing that the collapse of the Soviet Union and our collective victory in the Cold War had fundamentally changed the strategic landscape, President Bush articulated a new, regionally oriented, national security strategy. This strategy, codified in the White House publication National Security Strategy of the United States, seeks to maintain global and regional stability by: (1) ensuring that no hostile power is able to dominate or control a region critical to our interests, and (2) working to avoid conflict by reducing sources of regional instability and violence.<sup>3</sup>

Military strategy which reflected these changes was developed by Secretary of Defense and first articulated by the Chairman, Joint Chiefs of Staff in the January 1992, National Military Strategy of the United States. The four fundamental pillars for defense are strategic deterrence and defense, forward presence, crisis response, and reconstitution.<sup>4</sup>



This new strategy is, in many ways, more complex than the containment and deterrent designs of the Cold War era and is decidedly focused around regional conflict.

Expeditionary Environment. Due to the traditionally expeditionary nature of the aircraft carrier, the Navy is particularly suited for **forward presence** and **crisis response**. U.S. security and military strategies require adaptive expeditionary forces that can operate forward and effectively respond to the brush fires of the future. As expressed in *From the Sea*, "Naval Expeditionary Forces provide unobtrusive forward presence which may be intensified or withdrawn as required on short notice".<sup>2</sup>

A snapshot of the global security picture in January, 1993 highlights the carrier's expeditionary capability in the "new world disorder". Carriers were simultaneously involved in three significant military operations; e.g., the humanitarian relief effort in Somalia (USS *Ranger* CV-61), enforcing the Iraqi no-fly zone (USS *Kitty Hawk* CV-63) and forward presence operations off the coast of the former Yugoslavia (USS *John F. Kennedy* CV-67).

The centerpiece for U.S. national security interests is, and will likely remain, the aircraft carrier. This quintessential expeditionary asset will continue to provide CINCs the ability to meet the challenges of regional instability in the elements of forward presence and crisis response.

From the Sea - Open Ocean to Near Land. Operating in regional areas of the globe is interpreted by the Navy to mean performing maritime missions in littoral waters. *From the Sea* states:

Our ability to command the seas in areas where we anticipate future operations allows us to re-size our naval forces and to concentrate more on capabilities required in the complex operating environment of the "littoral" or coastlines of the earth.<sup>6</sup>

But it would be wrong to surmise that, devoid of Soviet military influence, U.S. command of the sea is preeminent. Suffice it to say that less emphasis can be placed on sea control in a regional conflict and more on sea denial (use by you, denial to the enemy) and power projection.

#### **Shifting Paradigms for Employment.**

As the focus shifts away from open-ocean war-fighting toward the littoral, concepts for carrier employment continue to evolve.

While carriers are still needed to protect the Sea Lines of Communication (SLOCs), increased emphasis is being placed on its unique "enabling" features. These features center around the carrier's ability to quickly move forward and influence events in a crisis situation; e.g., provide the underpinning for diplomatic activities or create the nucleus for joint power projection.

Power projection, at the lowest end of the spectrum of conflict, can now be described as *influence projection* or,

as Les Aspin recently described, *compellence*. Admiral Paul David Miller writes,

The new security environment requires the United States to project not only force but also influence. The changed world calls for the military to be both a *sword* and a *plowshare* in maintaining peace.<sup>7</sup>

As the nucleus for joint operations, the aircraft carrier can facilitate a smooth transition from crisis to conflict. Gaining sea control in the area of regional conflict and sea denial in the littoral enables the introduction of subsequent joint forces and ensures access for the logistic support required to sustain military action.

### Emerging Themes

In sum, it is prudent that the operational commander consider the following themes which emerge from the ashes of the Cold War:

- \* Regional conflict will likely dominate the international strategic landscape of the future.
- \* As a premier expeditionary asset, the carrier will play an increasingly important role in the areas of forward presence and crisis response.
- \* Maritime emphasis has shifted from sea control of the open-ocean to sea denial and power projection from the littoral.
- \* The carrier functions as an effective "enabling force" in the littoral by providing the capability to act as both a sword and a plowshare.

### III. PROBLEMS AND RISKS

#### Problems

Defining the Battlespace. During traditional, open-ocean carrier operations, the battlespace was well defined. Water space, underwater space, and air space were painstakingly sliced into distinct areas of responsibility. As the battle group approached the coastline, there was a purposeful lack of overlap between the carrier's airspace and the Amphibious Operating Area (AOA), greatly simplifying command and control. Now the lines of control and areas of operation are less distinct as the carrier battlespace becomes a part of the joint littoral battlespace.

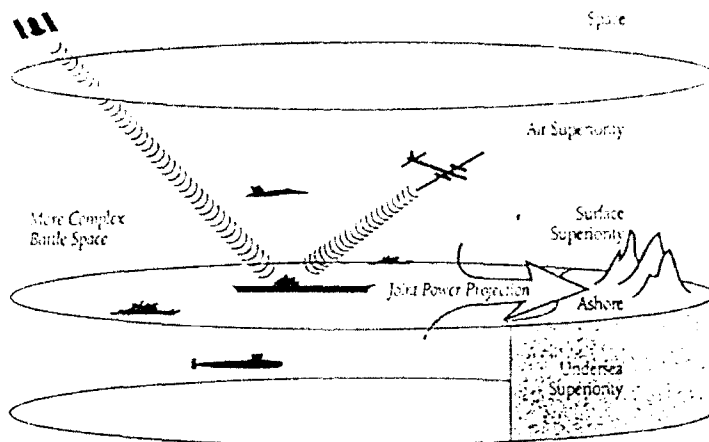
As a general concept, From the Sea defines the littoral as comprising two segments of the battlespace:

- \* Seaward: The area from the open-ocean to the shore which must be controlled to support operations ashore.

- \* Landward: The area inland from shore that can be supported and defended directly from the sea.<sup>a</sup>

The edges of these areas, then, are indistinct and cannot be defined by mere nautical miles or kilometers but, instead, will depend on the power projection capabilities of our forces and those of our enemy. The boundaries will

expand and contract like an accordion under the pressures of combat. Hence, the two concepts of warfare - sea and land - collide and meld, making one relatively indistinguishable from the other, creating the complex, joint littoral battles;




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Source: Miller, Paul D., Both Swords & Flowshores, Institute for Foreign Policy Analysis, Tufts University, 1992, p. 33.

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The Resource/Task Dilemma. Naval Warfare Publication (NWP) 1, Strategic Concepts of the U.S. Navy, sets forth specific fundamental and supporting maritime tasks: Anti-air Warfare (AAW), Anti-submarine Warfare (ASW), Anti-surface Ship Warfare (ASUW), Strike Warfare (STW), Amphibious Warfare (AMW), Mine Warfare, Ocean Surveillance, Intelligence gathering and reconnaissance (RECCE), Command, Control and Communications (C3), Electronic Warfare (EW), and Logistics.<sup>6</sup>

The traditional, open-ocean carrier needed this diverse package of war-fighting skills. Independent battles against the Soviet Fleet in the bastion of the North Atlantic meant

simultaneously maintaining sea control, projecting power, and Fleet Air Defense (FAD). Most airwings today still possesses this wide range of capabilities.

However, this diversity is a "two edged sword". The operational commander can quickly respond, with a broad range of options, against virtually any air, surface or sub-surface threat. But the overall effectiveness of this force is a "mile wide and an inch deep".

The role of the carrier in Desert Shield and Desert Storm provides a useful example of this paradox of capabilities and limitations. As noted in a post-war Department of Defense report:

Within one hour of the start of the 2 August attack, the USS Independence (CV-62) battle group (forward-deployed to the Indian Ocean) and the USS Dwight D. Eisenhower (CV-69) battle group (forward-deployed to the eastern Mediterranean Sea) were ordered to the Gulf of Oman and the Red Sea, respectively.<sup>10</sup>

The carriers had the capability to fulfill a wide range of warfare tasks, but the CINC's real needs centered around strike warfare; e.g., the ability to bomb Iraqi forces if they invaded Saudi Arabia. The carrier force was actually limited by diversity and not optimized for the task at hand.

Ironically, over-specialization (tailoring an airwing around strike warfare) also presents a dilemma. The operational commander has the capability to generate a higher number of strike sorties but is limited in his ability to perform other tasks (notably ASW and AAW).

The Falklands War serves as an example of the price of over-specialization. On 21 May, 1982, Argentinian pilots penetrated the air defense screen set up by the AV-8B Sea Harrier - primarily a strike aircraft - around the Amphibious Operating Area. In his book *Task Force, The Falklands War, 1982*, Martin Middlebrook describes the action:

The carrier group out at sea had seen no action but the seven destroyers and frigates in Falkland Sound had sacrificed themselves to protect the landing ships and forces ashore. The *Ardent* was sinking; *Antrim* and *Argonaut* were out of action with unexploded bombs lodged inside them; *Brilliant* and *Broadsword* had been damaged. Only *Plymouth* and *Yarmouth* were unscathed. From a strictly military point of view, these losses were not serious; all of these ships could be replaced...But three British Naval Officers and twenty-one ratings were dead and a further twenty-five injured, some seriously; one man would never see again."<sup>11</sup>

What is needed, it seems, is an airwing which is diverse enough to handle all threats and specialized enough to provide ample firepower when required - an "adaptive" airwing. More about this later.

The Strategy/Doctrine Debate. Fundamental conceptual differences in the nature of sea battle compared to land battle have in the past justified the Navy's reliance on maritime strategy vice operational doctrine.

The realities of today's security environment and the shift toward littoral warfare have called into question the validity of these conceptual differences. As naval forces move into the restricted, near land environments, the uniquely maritime concepts of freedom of movement,

independence, flexibility, mobility, and security need to be scrutinized. The differences in land, sea, and air warfare become quite indistinct in the context of the littoral environment.

This has left modern maritime strategy in a quandary and deficient in providing the necessary foundation and framework on "how to fight" in this complex, near-land environment.

While powerful figures and convincing arguments loom on both sides of the naval doctrine debate, both generally agree that it will take more than traditional thinking and new technology to prevail in the future.<sup>12</sup> "Change demands new ideas, new assumptions, new approaches, but only doctrine can channel them into a comprehensive way of thinking - and fighting."<sup>13</sup> As Abraham Lincoln put it, "The dogmas of the quiet past, are inadequate to the stormy present...As our case is new, so we must think anew and act anew. We must disenthrall ourselves".<sup>14</sup>

In general, doctrine provides the framework or baseline for "how to fight" and effectively employ the carrier in the littoral arena. Specifically, doctrine can help address a number of key issues: How can carrier forces best be employed to gain and maintain air superiority in the sea-land interface operating area? How can carrier-based aircraft use strategic air operations and deep air interdiction to help wage a successful land campaign? What specific command arrangements are most effective in



integrating carrier-based airpower with land-based air power?<sup>15</sup>

The complexities of operating in littoral vice open-ocean environments point to revolutionary change in the concept of modern warfare. The Navy cannot look to the 1980's Maritime Strategy to provide guidance on how to effectively fight, train, develop technology and structure forces on the littoral battlefield. The Goldwater-Nichols Department of Defense Reorganization Act of 1986, in fact, demands that we break down our defiance and resistance to change and develop joint doctrine. Naval forces will be the principle enabling tool for the operational commander and the Navy has the opportunity to develop the foundation for war-fighting in the littoral environment. Before this can happen, the Navy's fundamental war-fighting principles must be "extracted, re-assessed, and codified into a single, official doctrine for the Navy of the twenty-first century".<sup>16</sup>

A sound first step has been the establishment of the Navy Doctrine Center, co-located with the Army and Air Force Doctrine centers in Hampton Roads, Virginia. The Navy should take command of this "fast train" by translating **maritime strategy** into **naval doctrine** and provide the leadership for developing joint littoral doctrine.

## Risks

Defending the Carrier. Desert Storm serves as a useful point of departure for examining the key issues and provides an effective backdrop for anticipating the dangers associated with future littoral operations.

Much has been written about the overwhelming success of Desert Shield and Desert Storm and the Navy can be justifiably proud of the aircraft carrier's role in this unique victory.

But we must be certain that the lessons learned from the Gulf War are salient in terms of appreciating the risk involved if the enemy is less cooperative. Keep in mind this effort required six aircraft carriers to operate in waters previously considered too dangerous for carrier operations.<sup>17</sup> Consider the following points:

**First, The Iraqi surface Navy was small and ineffectual.** The offensive arm of the Iraqi fleet consisted of a few ex-Kuwaiti fast attack boats and a training frigate.<sup>18</sup> Unfortunately for the Iraqis, the fire control radars used for the modern anti-aircraft guns on the attack boats were incapable of keeping a lock at high speeds - due to excessive hull vibration. This made the small craft defenseless. British Lynx helicopters, carrying the Sea Skua, were able to disable the small attack craft before they became a threat.<sup>19</sup> Coalition aircraft would then finish them off with unguided bombs.

It would seem to follow that larger boats, equipped with better fire-control systems will not only handle a helo threat but also remain in action longer. Undoubtedly, this lesson has not been lost on Third World nations as they pursue ways to improve their littoral navies.

**Second, the airborne missile threat never materialized.** Iraq was reluctant to use its armory of 400 AM-39 Exocets in the face of overwhelming coalition air superiority.<sup>20</sup> Only one maritime air strike was attempted and the Mirage F-1 was shot down by Combat Air Patrol aircraft.<sup>21</sup>

However, the threat of airborne attack could never be discounted altogether. "After all, they had used air-launched Exocets through much of the Iran-Iraq War, including the near fatal [sic] attack on the USS Stark (FFG-31)".<sup>22</sup>

The upshot was that carriers in the Red Sea and Persian Gulf maintained constant combat air patrol, over and above the air patrols protecting Saudi Arabia. In effect, this reduced the number of aircraft that could attack Iraq.<sup>23</sup>

Third World nations may not be as hesitant in future conflicts to use their air force against the carrier.

**Third, coalition forces were able to operate largely beyond the range of coastal Iraqi Silkworm missile launchers.** "Iraq was able to launch only a single Silkworm missile in the war - on 25 February 1991 against the USS Missouri (BB-63). It was intercepted by two Sea Dart surface-to-air missiles fired from HMS Gloucester."<sup>24</sup> But

the small mobile launchers proved to be extremely difficult to locate and Iraq still had numerous Silkworms at the end of the conflict.<sup>25</sup>

What if Iran had joined in the fray and brought her plethora of coastal silkworms to bear? Would the carriers have then been forced to fight their way into the Persian Gulf or be forced to operate from the Indian Ocean? Luckily, this threat never materialized but it, once again, points out the uniqueness of the Gulf War.

**Fourth, Iraqi mine warfare was highly effective.**

Testifying before the Senate Armed Services committee in June 1991, General Schwarzkopf admitted that the extensive Iraqi minefields "had a serious impact " on U.S. plans to conduct an amphibious assault along the coast of Kuwait.<sup>26</sup>

After the war, Iraq estimated that it laid 1,200 mines during the conflict. Coalition forces reportedly sighted 225 and destroyed 133.<sup>27</sup> "On 17 February 1991, the amphibious assault ship, USS Tripoli (LPH-10), and the Aegis cruiser, USS Princeton (CG-59), struck mines and were damaged."<sup>28</sup>

Mines will continue to be an effective tool in third world, littoral regions. They are cheap, anonymous, easily deployed and readily available on the global arms market. Recent studies indicated that the Soviets own 250,000 to 450,000 mines.<sup>29</sup> The proliferation of mines among Third World nations is a concern as the former Soviet republics attempt to shore up their failing economies. Add that to a

world mine inventory numbering perhaps in the hundreds or thousands, held by more than 40 states, and the full dimension of this undersea threat to U.S. and allied interests comes into sharper focus."<sup>20</sup>

**Finally, The Iraqis didn't own any submarines.**

Nevertheless, this problem cannot be ignored and is considered by most military experts to be the number one difficulty facing forces operating in shallow water. Most believe that the Navy lacks both the weapons and sensors to fight shallow water ASW. Here are some of the concerns:<sup>21</sup>

- \* Research and development concentrate on the open-ocean environment.

- \* Fixed array hydrophon systems do not cover the coastal zone; they look outward from the continental shelf.

- \* Towed array passive sonars are impractical in shallow water because of high ambient noise levels and the possibility of damage if the array hits bottom.

- \* The Mark 46/48 torpedo requires a separation between target and sea floor making them difficult to use against a target hovering near the bottom.

Coincidentally, in December the Iranian navy took delivery of the first of three Kilo-class diesel-electric subs from Russia.<sup>22</sup> One anti-submarine warfare specialist sees the Kilo as a particular littoral threat because of its capacity to wreak havoc with "torpedoes and mines as well as covert commando operations against coastal oil installations."<sup>23</sup>

The continued proliferation of submarines among Third World nations presents a monumental challenge to operational commanders wishing to exploit the littoral battlefield.

### Problems/Risks Conclusions

In sum, there are several problem/risk take-aways for the operational commander to consider and digest when considering employment of the carrier in future littoral operations:

- \* The littoral battlespace is ill-defined and highly complex.

- \* The traditional airwing provides the operational commander with diverse capabilities but is limited in its ability to bring forces to bear in any one warfare area.

- \* The Navy's Maritime Strategy has limited application in littoral warfare. Evolving naval doctrine will provide the "how to fight" in this new environment.

- \* Desert Storm was an aberration. Further analysis reveals that mines, subs, coastal batteries, air-to-air/air-to-surface missiles will be serious threats in future littoral conflicts. Third World weapons proliferation will exacerbate the problem.

#### IV. THE NAGTF & THE ADAPTIVE AIRWING - CONCEPTS FOR SUCCESS

Our capacity to employ maneuver warfare at sea, moving from deep to shallow water, then over land in a seamless way, allows maritime striking forces to concentrate intensive offensive power at a time and place of our choosing to seize and hold littoral facilities.<sup>34</sup>

##### The "Ways" to Fight

The Naval Air Ground Task Force (NAGTF). While doctrine can provide the framework for "how the carrier will fight" in the littoral environment, the "ways" of effectively employing the carrier in the "near land" arena must be analyzed.

To become effective in the littoral environment, the carrier must offset the limiting factors (problems and risks) inherent in operating close to shore by seizing opportunities. Carrier forces operating in *brown* water vice *blue* water can take advantage of strengths and capabilities. While technologies continue to evolve around this arena, the Navy is challenged to develop operational concepts to fully integrate the aircraft carrier in sea-land interface warfare.

Fortunately, the Navy need only look within to find the foundation for change. The United States Marine Corps (USMC) provides the conceptual basis for using maritime forces to effectively and expediently transition from

seapower to land power. The Corps is especially adept at understanding the concepts involved in power projection from the littoral. Originally established as a combined arms team, the Corps' very nature is to fight in a joint manner - to simultaneously exploit the capabilities of air, land and sea warfare.

Maneuver warfare, the cornerstone for USMC littoral battle, serves as an "accelerator" for the shift in emphasis from the traditional maritime concepts of flexibility and mobility to maneuver from the sea. "Maneuver from the sea, the tactical equivalent of maneuver on land, provides a potent war-fighting tool to the joint task force commander - a tool that is literally the key to success in many contingency scenarios".<sup>35</sup>

Fleet Marine Field Manual 1 (FMFM 1) offers the best definition of the modern concept of maneuver and considers application in both dimensions - space and time:

"Maneuver warfare is a war-fighting philosophy that seeks to shatter the enemy's cohesion through a series of rapid, violent, and unexpected actions which create a turbulent and rapidly deteriorating situation with which he cannot cope".<sup>36</sup>

The Marine Corps has chosen the Marine Air Ground Task Force (MAGTF) to provide "forward-deployed or rapidly-deployable forces capable of mounting expeditionary operations in any environment".<sup>37</sup> This task organization is equipped and structured to perform a flexible variety of tactical actions - amphibious, air, and land.



The MAGTF consists of ground, aviation, combat service support, and command components that have no standard structure, but are constituted as appropriate for the specific situation. It is an independent, self-contained fighting force that can employ elements of air, land and sea to act alone in an undeveloped theater of operations where no command structure is in place or in concert with other forces, in a developed area, as part of a campaign.<sup>30</sup>

Historically, carrier forces merely opened the door for the Marine Corps and subsequent amphibious operations. There was, in effect, a hand-off to the Marine Corps during the carrier's approach to the littoral. The carrier's role was to provide air superiority in the battlespace and, thereby, keep the SLOCs open for support and reinforcement.

This view was articulated in a recent *U.S. Naval Institute Proceedings* article which stated that the most important and primary function in the objective area is to "subjugate enemy air forces so that the rest of the Navy and Marine Corps force can get on with its assignment. The carrier exists for the care and feeding of air superiority fighters - and everything else is secondary."<sup>31</sup>

This, of course, justifies the carrier's existence, but it does say not much about what the carrier can do once it has established air superiority and can now be used to satisfy other operational requirements. Furthermore, it views the carrier in a detached, "supporting" role incapable

and unwilling to expand its focus beyond the attainment and preservation of air superiority and self defense.

While absolute air superiority is tenuous at best, it is conceivable that in most third world, littoral contingencies the aircraft carrier will be able to maintain air superiority and support amphibious and land operations with sea-land-air interface missions. (Close Air Support - CAS), Battlefield Air Interdiction - BAI). Therefore, the carrier must be able move from the "supporting" to a "full participant" role.

On the *From the Sea* battlefield, the carrier will no longer "hand the ball off" to the Marine Corps but, instead, "run up the middle" of the littoral and join in synergistic blue/green warfare.

What is envisioned is the **Naval Air Ground Task Force** (NAGTF). A concept which takes advantage of the capabilities of the carrier and MAGTF. The aircraft carrier will supply horsepower to the NAGTF with potent power projection forces. The Marine Corps will provide the nucleus for littoral doctrine, amphibious command and control and maneuver warfare.

The exact "flavors of forces" making up the NAGTF is not as important as the idea itself. The aim here is to adopt the concept of an expeditionary naval service that takes advantage of the unique capabilities of the Navy and the Marine Corps. This concept will, in turn, provide the

focus of the Navy/Marine team in organizing, training, and equipping our littoral forces.

The interoperability between these forces will provide the synergy which "results when the elements of the joint force are so effectively employed that their total military impact exceeds the sum of their individual contributions."<sup>40</sup>

There are legitimate operational challenges that must be overcome before the NAGTF can reach its full potential and provide the operational commander a force that can effectively act independently and serve as a nucleus for follow-on joint operations. They include:

- \* Improving the carrier's capabilities to assume the role of Joint Forces Functional Air Component Commander (JFFAC) or serve as Joint Task Force (JTF) headquarters.

- \* Fully integrating the carriers Composite Warfare Commander (CWC) doctrine with accepted procedures for command, control and employment of amphibious forces.

- \* Educating the Commander Amphibious Task Force (CATF) on how to effectively work with the CWC to effectively integrate the carrier airwing.

These challenges can be met but necessitate increased cooperation between the Navy and Marine Corps in order to develop appropriate littoral war-fighting capabilities. The NAGTF provides the basis for this cooperation.

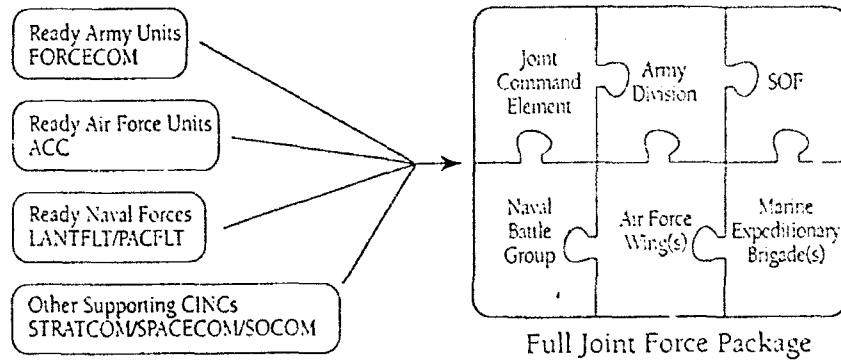
## The "Means" to Fight

The Adaptive Airwing. During the last two decades, we have responded to each CINC's requirements with a fairly rigid combination of permanently assigned forces and standardized deployment groups.<sup>41</sup> However, in view of the changed strategic landscape and the need to downsize force structure, efforts are underway to organize, train and employ forces that make up in joint capabilities what we lose in size.<sup>42</sup>

General Colin Powell, Commander Joint Chiefs of Staff (CJCS), and Admiral Paul David Miller, Commander in Chief, Atlantic Command (CINCLANT), are leading the endeavor to evaluate "ways to better organize and train forces, making it easier for supported CINCs to call forward the specific brands of capability needed in their respective AORs. "The focus will be on "rotationally deployed forces" from all services organized into an Adaptive Joint Force Package - a package of specific capabilities scheduled to deploy during a given period, supported by designated back-up units that remain stateside."<sup>43</sup>

The idea works like this. Ready units from each service are drawn to forge the full joint force package. This package is trained jointly (together) and structured to support specific requirements of a particular CINC. "The

training must focus on contingencies and operations that the joint force may be called upon to execute".<sup>44</sup>

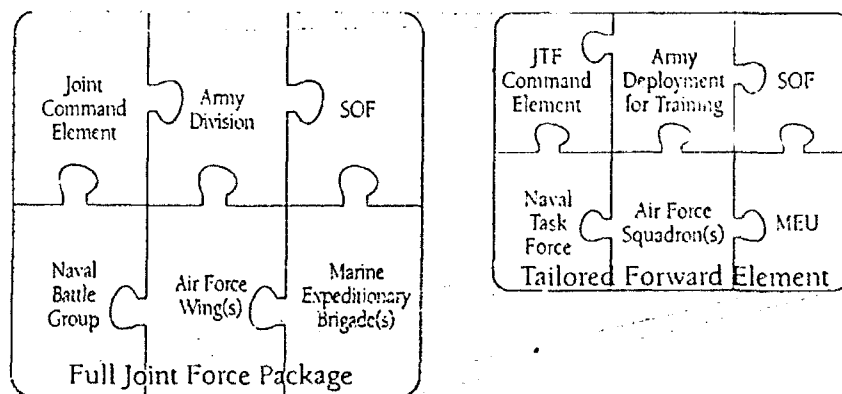



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Source: Miller, Paul D., *Both Swords & Plowshares*, p. 28.

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As forces are needed, the package is adapted and tailored elements of the full package can be moved forward to meet the CINCs particular requirements. As this concept matures, the aim is to allow the supported (CINC) to "write a more accurate prescription" - based on the current situation in his AOR.




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Source: Miller, Paul D., *Both Swords and Plowshares*, p. 29.

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Admiral Paul David Miller, in his visionary work, *Both Swords and Plowshares: Military Roles in the 1990's*, sees the concept satisfying several other important objectives:<sup>45</sup>

- \* since the full joint force package will be trained and exercised together, additional forces can be deployed into a theater when they are required. Surge forces will arrive in the theater organized, trained and ready to support the CINC's requirements.

- \* The careful calibration of forward positioned capabilities to the needs of each CINC means we can maintain needed forward presence without over-committing our forces.

One example of this concept can be found in the recent incorporation of a Special Marine Air Group Task Force (SPMAGTF) - 10 F/A-18s (VMFA-312), 600 Marines, 6 CH-53Ds and 4 UH-1 - as part of Carrier Air Wing Eight (CVW-8) onboard the USS *Theodore Roosevelt* (CV-71).<sup>46</sup> The move has given the Roosevelt the capability to carry out a variety of missions; e.g., noncombatant evacuation, humanitarian assistance, disaster relief, and hostage rescue. But at a price. Due to deck space limitations, the airwing now has 8 fewer F-14s, 12 fewer A-6's, and 0 S-3s. This points to reduced capability in AAW, ASW, and all-weather strike. Does this over-specialization sound familiar?

The adaptive (NAGTF) airwing concept would take this concept one level higher. The operational commander would be empowered with the flexibility to adapt carrier assets

after deployment as the requirements of the AOR or battlefield change. This would go a long way in solving the resource/task dilemma.

So, instead of bringing forward merely additional tailored airwings, the CINC can call forward decidedly different kinds of forces with different capabilities. A point must be emphasized here. This is not another notional airwing. It is an adaptive airwing.

For example, when the carrier first deploys the tailored airwing might look something like the *Roosevelt* airwing - designed to carry out a variety of Lower Intensity Conflict (LIC) missions.

<p style="text-align: center;"><b>Low Intensity Conflict Mix</b></p> <table><tr><td>12 F-14</td><td>6 CH-53</td></tr><tr><td>30 F/A-18</td><td>4 UH-1N</td></tr><tr><td>12 A-6</td><td></td></tr></table>	12 F-14	6 CH-53	30 F/A-18	4 UH-1N	12 A-6	
12 F-14	6 CH-53					
30 F/A-18	4 UH-1N					
12 A-6						

When a crisis develops, the carrier could be required to "flex out" of the littoral and then "flex in" - fighting its way back in with a preponderance of air superiority assets (F-14), long-range strike aircraft (A-6), and anti-submarine assets (S-3). Elements of the SPMAGTF would fly off to airfields in the AOR or "lily pad" to other elements of the NAGTF.

F-14s, A-6s, and S-3s would fly on as part of the adaptive airwing.

**"Flex In" Mix**

20 F-14  
20 F/A-18  
24 A-6  
5 S-3

After air superiority is established and the carrier moves into the Amphibious Operating Areas (AOA) the mix will include aircraft and helicopters designed to support the Marine Corps and the land battle. (F-18, AV-8, CH-53).

**Mid Intensity Conflict Mix**

12 F-14      12 AV-8  
28 F-18      6 CH-53  
12 A-6

Naysayers will certainly pointing to a myriad of maintenance, personnel and logistical concerns. These problems can be overcome with innovative and forward-thinking deployment/support packages. The Navy can meet the challenge of providing the forces relevant to the task at hand - the CINC deserves no less.



## V. CONCLUSION

The blue water carrier will provide the operational commander an effective war fighting tool in the brown water conflicts of the future.

Regional concerns will likely continue to dominate the global security environment. The expeditionary nature of the aircraft carrier will allow it to move forward quickly and resolve events in a manner favorable to U.S. security interests. Once on station, the carrier will provide independent influence and power projection or act as a nucleus for joint operations. Operational commanders must understand, and take advantage of, the inherent capabilities of this uniquely capable expeditionary asset.

But there are significant problems and risks associated with operating in the confines of the littoral. While Desert Storm proved that carriers could, under certain circumstances, successfully operate in littoral waters, analysis confirms the hostile nature of this complex environment. The risks of operating in coastal waters will continue to increase as Third World nations expand their inventories of mines, attack aircraft, air-to-surface missiles, submarines, coastal defense vessels, and coastal surface-to-surface batteries. Doctrine must be developed to move beyond the maritime strategy of the past decade in order to provide littoral war-fighters the "how to" operate

in this complex environment. The real "littoral lessons learned " from Desert Storm and the other significant problems and risks must be studied, digested and applied toward future littoral conflicts.

Finally, innovative concepts must continue to evolve which offer the CINC the necessary resources for fighting on the littoral battlefield. As force structure is reduced the operational commander will be again asked to do more with less. Concepts must be developed which allow the CINC to effectively tailor his resources around the specific requirements of his AOR and apply these resources efficiently across the spectrum of conflict. The MAGTF combined arms team and the tailored airwing are visions of the way ahead.

## FOOTNOTES

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- <sup>3</sup>. Ibid., p. 3.
- <sup>4</sup>. Chairman Joint Chiefs of Staff, The National Military Strategy of the United States (Washington: 1992), p. 6.
- <sup>5</sup>. Secretary of the Navy et al., p. 3.
- <sup>6</sup>. Ibid., p. 2.
- <sup>7</sup>. Admiral Paul David Miller, Both Swords and Plowshares (Cambridge: Institute for Foreign Policy Analysis, 1992), p. 14.
- <sup>8</sup>. Secretary of the Navy et al., p. 5.
- <sup>9</sup>. U.S. Navy Dept. Strategic Concepts of the U.S. Navy, NWP 1 (Rev. A) (Washington: 1978), p. 1-4-2, 1-4-3.
- <sup>10</sup>. U.S. Dept. of Defense, Conduct of the Persian Gulf War (Washington: 1982), p. 209.
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- <sup>12</sup>. Major Stephen D. Schmidt, "A Call for Official Naval Doctrine," Naval War College Review, Winter 1993, p. 45.
- <sup>13</sup>. Ibid.
- <sup>14</sup>. Abraham Lincoln, quoted in Abraham Lincoln, Speeches and Writings, 1859-1865 (New York: Library of America/Viking Press, 1989), p. 415.
- <sup>15</sup>. Price T Bingham, "Air Power in Desert Storm," Airpower Journal, Winter 1991, p. 36.

- <sup>16</sup> Schmidt, p. 56.
- <sup>17</sup> Ibid., p. 54.
- <sup>18</sup> Norman Friedman, Desert Victory: The War for Kuwait (Annapolis: Naval Institute Press, 1992), p. 208.
- <sup>19</sup> Ibid. p. 209.
- <sup>20</sup> Sanjay J. Singh, "Indian Ocean Navies - Learn From War", "U.S. Naval Institute Proceedings, March 1992, p. 52.
- <sup>21</sup> Ibid.
- <sup>22</sup> Friedman, p. 210.
- <sup>23</sup> Ibid.
- <sup>24</sup> Singh, p. 53.
- <sup>25</sup> Friedman, p. 210.
- <sup>26</sup> Edward J. Walsh, "'Bold Approaches'" Sought in Mine Countermeasures," Sea Power, March 1992, p. 39.
- <sup>27</sup> Singh, p. 53.
- <sup>28</sup> Ibid., p. 53.
- <sup>29</sup> Admiral Frank B. Kelso II, "Building Blocks of Naval Power," U.S. Naval Institute Proceedings, November 1992, p. 40.
- <sup>30</sup> Ibid.
- <sup>31</sup> Gretchen G. Grover, "Me Worry About Coastal Warfare?" U.S. Naval Institute Proceedings, October 1990, p. 67.
- <sup>32</sup> "Gulf States Turning to Anti-sub Capacity," The Providence Journal, 16 February 1993, p. A8.
- <sup>33</sup> Ibid.
- <sup>34</sup> U.S. Office of Naval Operations, Strategic Planning Guidance, Unpublished Draft, (Washington: 1992), p. 5.
- <sup>35</sup> Secretary of the Navy et al., p. 10.
- <sup>36</sup> U.S. Navy Dept., Fleet Marine Field Manual, FMFM 1 (Washington: March 1989), p. 58.
- <sup>37</sup> Ibid., p. 42.

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